IN THE CLAIMS

1-2. (canceled)

3. (currently amended) A rotary ~~An~~ electrical machine ~~according to claim 2~~, comprising a stator (S), a rotor (R), an airgap (E) between the stator (S) and the rotor (R), and permanent magnets incorporated in at least one of the rotor and the stator, wherein the magnets constitute at least a first group of magnets containing rare earths and a second group consisting of ferrite magnets, wherein a plurality of sub-assemblies (720, 721-731, 730, 732-800, 810 ...) is provided, each sub-assembly combining at least one magnet of the first group with a magnet of the second group arranged in superimposed relationship in a generally radial direction and wherein, at least one of said magnets being disposed radially so as to generate an orthoradial magnetic flux,

wherein a plurality of sub-assemblies of magnets (720-721, 730-732, 800-810) are provided inside the rotor, each sub-assembly combining at least one magnet of the first group with at least one magnet of the second group, at least one of the said magnets being oriented radially so as to generate an orthoradial magnetic flux,

wherein each sub-assembly comprises a magnet containing rare earths (721, 810) situated ~~close to~~ closer to the airgap (E) than the ferrite magnet, said magnet containing rare earth (721, 820) arranged in superimposed relationship in a generally radial direction with a ferrite magnet (720, 800).

4-8. (canceled)

9. (previously presented) A rotary electrical machine, comprising a stator (S), a rotor (R), an airgap (E) between the stator (S) and the rotor (R), and permanent magnets incorporated in at least one of the rotor and the stator, wherein the magnets constitute at least a first group of magnets containing rare earths and a second group consisting of ferrite magnets, wherein a plurality of sub-assemblies (720, 721-731, 730, 732-800, 810 ...) is provided inside the rotor, each sub-assembly combining at least one magnet of the first group with at least one magnet of the second group, at least one of the said magnets being oriented radially so as to generate an orthoradial magnetic flux, and

wherein each sub-assembly comprises a magnet containing rare earths (730) interposed, in a radial direction, between two ferrite magnets (731, 732).

10. (previously presented) An electrical machine according to Claim 9, wherein each sub-assembly comprises a magnet containing rare earths (910) situated close to the airgap (E) and in superimposed relationship in a generally radial direction with a ferrite magnet (900a, 900b) of the same thickness as the rare earth magnet, the said ferrite magnet including indexing means defined by at least one of a chamfered portion (9000a) and a notch (9000b).

11. (previously presented) An electrical machine according to Claim 10, wherein the first group consisting of rare earth magnets is of smaller size than the second group consisting of ferrite magnets.

12. (previously presented) An electrical machine according to Claim 11, wherein the sub-assemblies are mounted in the rotor (R).

13. (previously presented) An electrical machine according to Claim 12, wherein each sub-assembly consists of a magnet of the first group (721, 810 ...) situated close to the surface of the rotor (R) and arranged in superimposed relationship in a generally radial direction with a ferrite magnet (720, 800) situated close to the axis of rotation of the rotor.

14. (previously presented) A rotary electrical machine, comprising a stator (S), a rotor (R), an airgap (E) between the stator (S) and the rotor (R), and permanent magnets incorporated in at least one of the rotor and the stator, wherein the magnets constitute at least a first group of magnets containing rare earths and a second group consisting of ferrite magnets, wherein a plurality of sub-assemblies (720, 721-731, 730, 732-800, 810 ...) is provided inside the rotor, each sub-assembly combining at least one magnet of the first group with at least one magnet of the second group, at least one of the said magnets being oriented radially so as to generate an orthoradial magnetic flux,

wherein each sub-assembly comprises a magnet containing rare earths (721, 810) situated close to the airgap (E), arranged in superimposed relationship in a generally radial direction with a ferrite magnet (720, 800), and

wherein each sub-assembly comprises a magnet containing rare earths (910) situated close to the airgap (E) and in superimposed relationship in a generally radial direction with a ferrite magnet (900a, 900b) of the same thickness as the rare earth magnet, the said ferrite magnet including indexing means defined by at least one of a chamfered portion (9000a) and a notch (9000b).

15. (previously presented) An electrical machine according to Claim 14, wherein the first group consisting of rare earth magnets is of smaller size than the second group consisting of ferrite magnets.

16. (previously presented) An electrical machine according to Claim 15, wherein the sub-assemblies are mounted in the rotor (R).

17. (previously presented) An electrical machine according to Claim 16, wherein each sub-assembly consists of a magnet of the first group (721, 810 ...) situated close to the surface of the rotor (R) and arranged in superimposed relationship in a generally radial direction with a ferrite magnet (720, 800) situated close to the axis of rotation of the rotor.

18. (new) An electrical machine according to Claim 3,wherein both said magnets are disposed radially so as to generate a substantially orthoradial magnetic flux.

19. (new) An electrical machine according to Claim 3, wherein said magnet of the second group is located radially to generate an orthoradial magnetic flux, while at least one magnet of the first group is inclined with respect to the radial direction.